

ABSTRACT OF THE DISCLOSURE

First and second carrier modulators 1021 and 1022 each modulate a carrier having each different frequency with a baseband
5 input signal. First and second variable wavelength optical modulators 1031 and 1032 each convert the modulated signal into an optical signal having a first or second wavelength. An optical multiplexer 104 multiplexes the optical signals, and sends a multiplexed signal to an optical transmission line 105. A
10 wavelength separator 106 individually outputs wavelength components of the multiplexed signal. First and second optical receivers 1071 and 1072 each convert these wavelength components into an electrical signal. First and second filters 1081 and 1082 each pass only the signal components of each different frequency.
15 First and second burst demodulators 1091 and 1092 each demodulate the modulated signal. With such structure, a large-capacity optical communication apparatus capable of simultaneously using the same wavelength without requiring wavelength management in optical transmitting circuits can be achieved at low cost.